

EXECUTIVE SUMMARY

Overview

In May of 2013, Dedham Public Schools hired Dore & Whittier to perform a second update to the original masterplanning study first completed in 2003 and previously updated in 2008. The scope of this second update included:

- Facility condition assessments
- Enrollment projections analysis
- Space needs analysis relative to MSBA space guidelines
- Documentation of capital improvement items necessary to bring existing buildings into alignment with current building codes and regulations
- Conceptual options for each of the elementary schools and the early childhood education center that align with current MSBA guidelines and the District's educational philosophy

for six of the District's eight school buildings: Dedham High School, Capen/Curran Early Childhood Education Center, Dexter Elementary School, Greenlodge Elementary School, Oakdale Elementary School, and Riverdale Elementary School.

Facility Assessments

Since the 2008 update of the original master plan, Dedham Public Schools has completed the design and construction of Avery Elementary School, completed unit ventilator and boiler replacements at several elementary schools and Dedham High School, replaced selected roofs across the District, and commissioned a window replacement study for Dedham Town Hall, Dedham High School, and Greenlodge Elementary School. Other than these major improvements and regular maintenance, the physical condition of the six buildings in this study remain largely unchanged since the 2008 update. Most buildings require additional ventilation to meet current standards, are not in compliance with current accessibility regulations, need fire suppression systems, and could benefit from upgrades to windows, lighting, and plumbing fixtures to be more energy efficient. Although all schools evaluated in this study have similar physical plant needs, the Capen/Curran facility is not compliant with current building codes in one other respect. Current codes and regulations require students through grade 1 to be housed only on the level of exit discharge. As a multi-story facility with several classrooms on the upper level, Capen/Curran does not meet this requirement.

Enrollment Projections Analysis

Dedham Public Schools has been experiencing an enrollment decline over the last decade. Dore & Whittier reviewed three sets of enrollment projections provided by the district: NESDEC – November 2007, NESDEC – November 2012, and MSBA – March 2013. In 2007, NESDEC projected a fairly steep and

steady decline. In a projection produced in November of 2012, however, actual enrollment suggested the decline was not as steep as originally anticipated and the projection through the year 2022-2023 was adjusted to less severe decline.

Dore & Whittier used a prorated methodology based on the District's (Pre-K – K), (1st – 5th), (6th – 8th), (9th – 12th) grade configuration, NESDEC's 2012 grade level projection, and the District's desire to maintain neighborhood schools to determine enrollment targets for each of the schools in the study, adjusting for the completion of a redistricting effort associated with the new Avery Elementary school, to accommodate approximately 50 pre-kindergarten students, and to reflect an MSBA agreed upon enrollment of 200 students for kindergarten.

Avery Elementary School	310 Students
Capen/Curran Early Childhood Center	250 Students
Greenlodge Elementary School	312 Students
Oakdale Elementary School	313 Students
Riverdale Elementary School	190 Students
Dedham Middle School	653 Students
Dedham High School	725 Students

Space Needs Assessment

These enrollment targets were used in conjunction with the current MSBA Space Summary Template to establish guidelines for total gross square footage and for individual space requirements for each building. MSBA space guidelines continue to evolve and have changed since the 2008 master plan update.

The objectives of the space needs analysis were three-fold. First, it was critical to understand how individual spaces compared to MSBA guidelines. Next it was necessary to evaluate each building's overall total gross square feet relative to MSBA guidelines. Finally, combining these two data sets allowed for an understanding of where the District stands relative to total square footage.

The table below summarizes the findings for the total gross square footage analysis. With the exception of Avery Elementary School, all the occupied elementary schools are deficient with Greenlodge being the most deficient, 31% below the guideline. It should be noted, however, that an MSBA guideline for an early childhood education center does not exist. The target program used as a basis of comparison was developed in partnership with District personnel and must still be vetted with the MSBA. Of the six buildings included in this study, only Dedham High School exceeds the MSBA guidelines for total gross square footage.

	Current Grade Configuration	Target Enrollment	Current GSF	MSBA GSF*	Difference GSF	Difference %
Dedham High School	9-12	725	251,043	155,166	95,877	61.8%
Dedham Middle School	6-8	653	129,167	113,381	15,786	13.9%
Avery School	1-5	310	60,796	56,442	4,354	7.7%
Greenlodge School	1-5	312	39,898	57,913	(18,015)	-31.1%
Oakdale School	1-5	313	53,524	57,936	(4,412)	-7.6%
Riverdale School	1-5	190	37,098	45,173	(8,075)	-17.9%
Early Childhood Education Center*	PK-K	250	29,167	34,905*	(5,738)	-16.4%
Dexter School	N/A	N/A	25,541		25,541	
TOTALS		2,753	626,234	520,916	105,318	20.2%

* A Space Summary Template and MSBA GSF Guideline for an Early Childhood Education Center does not exist. Dore & Whittier worked with the District to define a preliminary program which must be vetted with the MSBA.

Dore & Whittier also produced color-coded diagrams to document how individual spaces compare to MSBA guidelines. In these diagrams, red is undersized. Yellow meets the guideline. Green exceeds the guideline. Grey represents those spaces occupied by non-school functions or entities. White represents spaces for which there is no guideline. In general terms, most classrooms are undersized with the most severely undersized classrooms occurring at Capen/Curran Early Childhood Education Center. Classrooms in that facility average approximately 700 net square feet, approximately 36% below the MSBA minimum of 1100. In addition to largely undersized classrooms, elementary schools and the early childhood education center have no cafeterias. Many have undersized or no art and music rooms.

Conceptual Options & Cost Estimates

Dore & Whittier prepared a set of options including a capital improvements only option - a definition of scope necessary to bring the existing buildings into compliance with current codes and regulations - and associated cost estimates for each of the facilities in the study. All costs in this study have been developed at a conceptual level and are reported as total project costs in 2013 dollars. Further study is needed to refine any scopes of work and associated cost estimates before proceeding with any specific project.

In addition to the capital improvement options, Dore & Whittier explored four other options:

- Option 1 Renovations and additions to each of the existing elementary schools and the early childhood education center on their existing sites.
- Option 1a Renovations and additions to each of the existing elementary schools with the exception of the Capen/Curran School. A renovation/addition to the Dexter School to house the early childhood education center.

Option 2 Demolition of the existing buildings at each of the existing elementary schools and the early childhood education center and all new construction on their existing sites.

Option 2a Demolition of the existing buildings at each of the existing elementary schools with the exception of the Capen/Curran School and all new construction on their existing sites. Demolition of the existing Dexter School and all new construction to house the early childhood education center on Dexter site.

Options 2 and 2a will likely require swing space during construction. Depending on specific design solutions and phasing strategies, options 1 and 1a may require swing space during construction. Should the District relocate the early childhood education center to the Dexter School site, the Capen/Curran building could serve as swing space as was first proposed in the original master plan. Costs below do not account for any modular construction as swing space.

	Dedham High School Site	Capen/ Curran Site	Dexter School Site	Greenlodge School Site	Oakdale School Site	Riverdale School Site	TOTALS
CIP Only	\$46,810,100	\$12,513,500	\$12,001,300	\$15,177,800	\$19,834,100	\$15,371,200	\$121,708,000
Option 1	\$46,810,100	\$17,206,800	\$0	\$25,715,300	\$25,958,600	\$21,666,200	\$137,357,000
Option 1a	\$46,810,100	\$0	\$17,923,100	\$25,715,300	\$25,958,600	\$21,666,200	\$138,073,300
Option 2	\$71,420,600	\$15,143,300	\$0	\$24,832,800	\$25,292,500	\$19,587,100	\$156,276,300
Option 2a	\$71,420,600	\$0	\$15,020,800	\$24,832,800	\$25,292,500	\$19,587,100	\$156,153,800

FOOTNOTES

1. Cost Estimates have been prepared by PM&C. Costs are conceptual in nature, are for comparison purposes only and are not intended for use in construction. They are based on current market conditions in July 2013 and must be adjusted for inflation and construction market conditions for each year beyond this date. No cost for phasing or portable classrooms has been included.

2. GC Overhead & Profit and estimated Soft Costs and Owner's Contingency have been included in these figures.

3. Refer to each section of the report for more detailed information. Before moving forward with a specific project, a detailed review of the scope of work and a re-assessment of the cost estimate for that scope should be performed.

4. Due to the conceptual nature of these recommendations and estimates as well as the complexity of existing conditions, several solutions may be available to achieve the desired result. Existing conditions in some areas may limit the ability to fully-implement the proposed scope of work. Part or all of this work may trigger other renovation requirements related to code, seismic, sprinklers or handicap accessibility. Once a determination is made to move forward with a specific improvement line item, a mini-study specific to the scope of work should be done to confirm the scope of work, prepare sketches as necessary and prepare a refined cost estimate.

5. Regarding window replacements, the estimate is based on replacing windows "in kind" for baseline/comparative cost calculations. Design options have not been considered at this stage and further study would be required to determine most effective strategies for each location. Other design strategies may exist and would need to be explored, in concert with wall construction replacement or upgrades.

6. Bulleted recommendation items from the Building Assessments/Master Plan Updates, that are related to reworking of building layout, are not included here. Although these are very important items to consider for future improvements, They are often large-scale in nature and not easily considered (or estimated) as typical capital improvement items.